TECHNICAL BOOK REVIEW INDEX

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JULIA WALLACE MARTIN, *Editor*

Volume 19 **December, 1953** **Number 10**

THE purpose of the Technical Book Review Index is primarily to identify reviews in current scientific, technical, and trade journals; secondarily, when feasible, to quote from these reviews. In the evaluation of scientific and technical books, reviews constitute the best existing source of information. The service of the Technical Book Review Index is thus in the field of evaluation, rather than in competition with existing publications which announce new and forthcoming books, list books by subjects, or supply bibliographic information. Each quotation immediately follows the name of the journal from which it is taken. Obviously, these brief extracts, detached from the context, must not be accepted as conclusive. Except for the correction of obvious errors, the bibliographic information is as given in the reviews. It is, therefore, in many cases incomplete and in some cases probably inaccurate.

Abbott, William.

Dimensioning of engineering drawings. 186p. 1953. Blackie, London, 10s. 6d.

Aircraft engineering, Oct. 1953, p.316. ½ col.

"The title . . . suggests a simple subject, but this is deceptive. Mr. Abbott is not concerned with how to draw arrows, or at what angle lettering should be set, although the illustrations in the text are admirable examples of these things. The book is concerned with the selection of tolerances, their application, and with the related subjects of fits and surface finish . . . Very well arranged and the subject is explored in a clear and logical way . . . A valuable work, both for the engineering student and for the draughtsman who may not have found the subject so fully discussed elsewhere."

Adams, Roger. **See Organic** reactions.

Advances in cancer research; edited by Jesse P. Greenstein and Alexander Haddow. v.1. 590p. 1953. Academic Press, New York, $12.

Chemical and engineering news, Nov. 16, 1953, p.4819. 2⅛ col.

"Written by experts for experts; thus, a degree of different specialized background knowledge is needed for early digestion of each of the very excellent presentations . . . Each of the articles is excellent; the literature is covered to an adequate extent and each has a good summary. Facts in the various fields are well presented and, most important, criticisms and presentations of points of view of the authors." *Stanley P. Reimann.*

Journal of the Franklin Institute, Sept. 1953, p.292. 1½ col.

"The ten phases of research described in this book by authorities in the respective fields provide a remarkably lucid picture of the status of cancer research for the reader with a reasonable background in the physical sciences . . . As the editors state, it is their purpose 'that this and succeeding volumes of this series shall reflect (the) steady and inevitable march of the tides of our knowledge and increasing understanding (of cancer).' This purpose seems to have been achieved with notable success in this first volume." *Albert L. Myerson.*

Amos, Stanley W., and others.

Television engineering; principles and practice. v.1. 300p. 1953. British Bk. Centre, Inc., 420 W. 45th St., New York, $6.75.

Radio-electronics, Nov. 1953, p.153. ½ col.

"Authentic and comprehensive . . . Written especially to instruct the BBC staff, and will be found of particular interest by TV camera engineers and technicians. The first part deals with fundamental topics . . . Part 2 compares and describes various types of camera tubes, and discusses construction and applications. Part 3 deals with optics and the basic principles of light, mirrors, lenses and view finders. The last chapter covers electron optics, including electrostatic and magnetic lenses. Several appendices treat more advanced and specialized subjects relating to electrons and light. Algebraic equations appear where helpful in both text and appendix." *I. Q.*

Aronson, Milton H.

Electronic circuitry for instruments and equipment. 312p. 1953. Instruments Pub., Pittsburgh, $4.

Electrical manufacturing, Oct. 1953, p.278, 280. ¼ col.

"A text book written for new workers but helpful as well to experienced ones; the author discusses the electrical nature of matter; basic circuit elements of resistance, capacitance, inductance, impedance, and resonance; signals and simple circuits; vacuum tubes and gas-filled types . . . A tightly written, readable, concise text which first ran serially in Instruments."

Balls, W. Lawrence.

The yields of a crop. 144p. 1953. E. & F. N. Spon, London, 21s.

Journal of the Textile Institute, Oct. 1953, p.P730. 1 p.

"Dr. Lawrence Balls tells us in the introduction to this extremely valuable and worthwhile book that he has known four and forty generations of cotton plants in Egypt, rather intimately. This, coupled with his reputation as the father of applied physiology as applied to the cotton plant, will ensure that what he has to say will be carefully studied by all who have to do with that crop . . . Should also be read by a much wider group of general agricultural workers, for Dr. Balls' unique and versatile method of approach is still unappreciated in its wide implications for general agricultural science." *S. C. Harland.*

Scientific monthly, Nov. 1953, p.273. 1 col.

"An abridged account of varied experimental studies that were directed toward understanding and improving the yield of the cotton crop in Egypt. It concerns itself with the effects upon that yield of the reform and development of the irrigation system from 1882 onward . . . The findings and conclusions of the author should be of much interest to agriculturists, especially in irrigated areas, and to research staffs in cotton manufacturing industries the world over; and the methods used in his study could be applied with modification to other crops . . . The author makes use to the fullest extent of graphs and illustrations . . . A valuable bibliography . . . together with a supplementary list of publications by the author . . . are also included." *A. A. Moursi.*

Barnes, Ralph M.

Motion and time study applications. Ed.2. 188p. 1953. Wiley, New York, $2.90.

Engineering, Oct. 9, 1953, p.479. ⅝ col.

"A collection of reports, papers and articles of a most miscellaneous kind, but all relating to some aspect of time or motion study. There are 48 of these contributions, many of which appear to be making their first public appearance; others are reprinted from periodicals, trade literature and the proceedings of technical societies . . . Prepared to serve as a text-book for students taking a course in the field of motion and time study."

Bergman, Stefan, & **Schiffer,** M.

Kernel functions and elliptic differential equations in mathematical physics. 432p. 1953. Academic Press, New York, $8.

Mathematical reviews, Oct. 1953, p.876. ⅓ col.

"In this book the authors collect their researches of the last few years on elliptic partial differential equations . . . The presentation is in an easy flowing style, and the material should prove to be a most useful guide to those interested in the more advanced theory of linear elliptic partial differential equations. Ample references to further literature are provided." *P. R. Garabedian.*

Bertrand, A.

Succulent plants. 112p. 1953. Philosophical Library, New York, $4.75.

American naturalist, Sept.-Oct. 1953, p.335. 6 l.

"An account of the cultivation, propagation, enemies, and families of the succulent plants. One chapter each is devoted to the Agavaceae, Liliaceae, Asclepidaceae, Crassulaceae, Euphorbiaceae, and Arizoaceae. One oddity should be noted—a beautiful colored plate of *Stapelia Hirsuta* is pasted on the wrapper cover but does not occur in the book itself. Fifty-five different species are illustrated."

Nature magazine, Oct. 1953, p.443. 8 l.

"Devoted to the succulent plants, other than cactuses, and to those that are of horticultural interest, either by reason of their beauty or their extraordinary appearance. The author has concentrated on those that are in cultivation and some that he feels should be better known."

Bikerman, J. J., and others.

Foams; theory and industrial applications. 347p. 1953. Reinhold, New York, $10.

Food engineering, Nov. 1953, p.189, 191. ¼ col.

"Complete and comprehensive, book is comprised mainly of data on chemical and physical properties of foam, with latter chapters devoted to applications of foam in industry. According to author, a well-known foam authority, book is designed to aid scientists who 'intend to profit by foam, or are plagued by it.' A critical treatise, volume is reported to be the only complete treatment of the subject. Indexed and supplemented with extensive bibliographies, the work is of particular interest to those in the beverage industry."

Glass industry, Nov. 1953, p.637. ¼ col.

"The only complete treatise on the subject of foams. The first section . . . comprising about three-fourths of the material, is devoted to the chemical and physical properties of foams . . . Subsequent chapters describe many important applications of foams in such fields as fire protection and froth or ore flotation. The final chapter offers information on the chemical destruction of foams important in petroleum and lubrication technology."

Petroleum processing, Nov. 1953, p.1751. ⅓ col.

"The first section, covering about three-quarters of the book, deals with the chemical and physical properties of foams, including chapters on formation and structure, method of measurement, results of measurements, foam drainage, mechanical properties, optical properties, electrical properties, radius of molecular action and the theory of foams. Succeeding chapters deal with fire-fighting foams, froth flotation, chemical antifoaming agents and other miscellaneous usages."

Blair, G. W. Scott. See **Scott Blair,** G. W.

Breland, Osmond P.

Manual of comparative anatomy. Ed.2, revised and rewritten. 256p. 1953. McGraw, New York, $4.50.

Journal of the American Medical Association, Oct. 3, 1953, p.526. ¼ col.

"Carefully revised and rewritten to conform with modern ideas. In addition to the classic animals, dogfish, necterus, and cat, it includes sections on the lamprey, perch, turtle, and pigeon . . . Well written and free from inaccuracies . . . The author should be complimented on his fine descriptive style . . . The only drawback . . . is the absence of illustra-

tions . . . Should be most helpful to students of comparative anatomy and will also serve as a reference for research workers."

Brewster, Ray Q.
Organic chemistry. Ed.2. 855p. 1953. Prentice-Hall, New York, $7.

Journal of chemical education, Oct. 1953, p.540. ¾ col.

"A text for a full-year course. It treats aliphatic and aromatic compounds separately . . . Certain features of the new edition represent a distinct advance over the old. There are approximately twice as many problems at the end of each chapter. A chapter on organometallic compounds has been added. And in numerous places small changes in content or phrasing have been made . . . Those who found the first edition of Brewster's text convenient to teach from will like the new edition better. Those who tried the first edition and then looked elsewhere will probably not be attracted back by the second edition." *Joseph F. Bunnett.*

Brimley, R. C., & **Barrett,** F. C.
Practical chromatography. 128p. 1953. Reinhold, New York, $5.

Chemical products and chemical news, Nov. 1953, p.438. ⅝ col.

"Should find a place on the shelf of all university or industrial libraries. The authors are concerned exclusively with the experimental side of the subject and have resisted the temptation of becoming involved in lengthy theoretical explanations." *J. R. M.*

Journal of the Society of Leather Trades' Chemists, Sept. 1953, p.310. ⅓ p.

"Deals mainly with methods . . . The authors have collected a considerable amount of information that is not always easy to trace from the literature . . . Generally the essential information is included in each chapter and references are given for further reading . . . Can be well recommended as an introduction to the subject and will repay the study by those who are constantly using these techniques." *K. S. K.*

Burghardt, Henry D., & **Axelrod,** Aaron.
Machine tool operation. Ed.4. 585p. 1953. McGraw, New York, $3.75.

Midwest engineer, Nov. 1953, p.29. ⅝ col.

"Tailored to fit the needs of the machine-shop apprentice and the student in a vocational or technical school. The experienced machinist may also derive some benefit from the book by using it as a reference material and a refresher, since a number of new machines and their latest attachments are illustrated in it . . . Those in need of simple knowledge of the principles and elementary operations of basic machines will derive a benefit from this text. However, it should not be looked upon as an engineering treatise in any sense or a production manual. The organization of the material as a whole is fair." *S. E. R.*

Burr, Irving W.
Engineering statistics and quality control. 442p. 1953. McGraw, New York, $7.

American foundryman, Nov. 1953, p.93. 10 l.

"Balanced treatment of subject presents both practical and theoretical side of statistics and quality control. Primary emphasis is upon statistics used directly by industry; methods presented are applicable to engineering research. Book was written for junior, senior, and graduate students and contains many illustrative examples, problems, and derivations."

Food engineering, Nov. 1953, p.191. ¼ col.

"Backed by twenty years of teaching experience, the author has written a sound and practical text for advanced students of engineering and science . . . Frequency tabulation as a useful tool, averages and variability, the normal curve, and a method for fitting and testing goodness of fit, are all included . . . Indexed and illustrated with photographs, sketches, and graphs."

Product engineering, Oct. 1953, p.294, 296. ⅜ col.

"A textbook study, written primarily for junior, senior and graduate students of engineering and physical science, presenting a sound, clear, unified and practical approach to a working knowledge of statistics . . . Though the book has been designed for college usage, it is also valuable for those in industry. Primary emphasis throughout . . . is upon statistics used directly by industry, and methods presented are applicable to engineering research. Treatment is balanced between theory and practice. Enough theoretical material is included to give a sound background and satisfy the pure statistician or mathematician while many random sampling experiments are given, the results of which are shown, to aid the student who cannot easily follow the derivations. Many illustrative examples and problems for student solution serve to clarify the applicational methods."

Carrigher, Sally.
Icebound summer. 262p. 1953. Knopf, New York, $3.95.

Natural history, Oct. 1953, p.340. ⅜ col.

"Description of landscape, meteorological events, relationships between the different animals, and the narrative style tie the book together so that it reads smoothly and does not leave the impression of a collection of discrete events—rather each chapter is a part of a fairly complete picture of Arctic wildlife. The writing is for adults but the wording is simple and clear, and children will certainly enjoy it. The pen drawings by Henry B. Kane are excellent." *James A. Ford.*

Clark, Charles C.
Hydrazine. 133p. 1953. Mathieson Chemical Corp., Baltimore, $3.

Journal of the American Chemical Society, Oct. 20, 1953, p.5137. ⅛ col.

"The organic chemistry of hydrazine is given major emphasis and in this respect the book constitutes a much needed companion volume to the Audrieth-Ogg treatment of the inorganic chemistry of hydrazine . . . In addition to the descriptive chemistry which constitutes the larger part of the book, information is also presented on handling, toxicological data and analytical procedures, together with an interesting and stimulating chapter covering the uses and applications of hydrazine and its derivatives. The author . . . is to be commended for his missionary effort in making available a very useful compilation covering both the open literature as well as new information based upon researches conducted in the laboratories of the Mathieson Chemical Corporation under whose sponsorship this book was written." *L. F. Audrieth.*

Cochran, William G.

Sampling techniques. 330p. 1953. Wiley, New York, $6.50.

Mathematical reviews, Oct. 1953, p.887. ⅔ col.

" "The purpose of the book is to present a reasonably comprehensive account of sampling theory as it has been developed for use in sample surveys, with sufficient illustrations to show how the theory is applied in practice, and with a supply of exercises to be worked by the student' . . . The book is remarkably up to date, more than half of the 96 papers and books referred to having appeared during the last 6 years . . . Being well-planned and easy to read, the book is very suitable both as a text and as a handbook." *D. M. Sandelius.*

Science, Oct. 30, 1953, p.523. ⅘ col.

"This book, written by a prominent statistician, gives a comprehensive outline of modern sampling theory as it has been developed for use in sample surveys. Professor Cochran is to be commended for not only writing an excellent, well-organized exposition of sampling, but also for attempting to impart some of his own experiences to help the reader develop a 'feel' for the manner in which sample surveys are used. The author succeeds admirably in this respect . . . This volume will long remain a classic in the field of sample surveys." *Marvin Zelen.*

Connell, R. S.

Practical jig and tool-making. 93p. 1953. Pitman, London, 12s. 6d. net.

Mechanical world, Sept. 1953, p.426. 10 l.

"Presents a broad survey in compact form of the tool room, what it is, what it contains and what it does. Its organization is briefly touched upon and there are descriptions of some of the more important tools, processes and machines. The book could well serve as an introduction for those who know nothing of the subject."

Cottrell, Alan H.

Dislocations and plastic flow in crystals. 223p. 1953. Oxford Univ. Press, London, 25s. (International series of monographs on physics.)

Metal industry, Oct. 2, 1953, p.283. 1⅝ col.

"The rapid progress in the theory of plastic deformation has undoubtedly left the non-specialist very bewildered. In the book under review, the solid achievements of the theory are set out logically and clearly for the first time, and it is difficult to over-rate the importance of this undertaking . . . To those already familiar with Professor Cottrell's reports in the 'Progress in Metal Physics' series, the pleasant lucid style will come as no surprise . . . On the basis of both scientific ability and skill in exposition, it is, indeed, impossible to imagine anyone better qualified to deal with this difficult subject." *J. W. C.*

Cuss, T. P. Camerer.

Story of watches. 176p. Philosophical Library, New York, $7.50.

Lapidary journal, Oct. 1953, p.372. ¼ col.

"A volume for those . . . readers who may be interested in watches and the history of watches; jewelers etc. . . . Tells the story of the watch from its origin in the portable clocks of the fifteenth century down to the factory made watches of today . . . A convenient reference book for horologists but interested laymen will find clear descriptions of the most complicated mechanical operations. This appears to be the only book presently available on watches."

Danielli, J. F.

Cytochemistry; a critical approach. 139p. 1953. Wiley, New York, $4.

Chemistry & industry, Oct. 17, 1953, p.1107. ½ col.

"A critical review of the basic essentials of *in situ* histo- or cytochemistry illustrated by reference to particular techniques studied by the author and his colleagues . . . There is no intention on the part of the author to present a textbook of the science and the chief value of the book, to those unfamiliar with histochemical methods as well as to *cognoscenti* (for the whole work is delightfully easy to read) lies in the stimulating nature of what the author has to say . . . The book cannot fail to enlighten all whose practice lies in any branch of histo- or cytochemistry as well as those who wish to obtain insight into the manner and progress of these comparatively young sciences." *A. G. Everson Pearse.*

Journal of the American Chemical Society, Sept. 20, 1953, p.4629. ⅝ col.

"Danielli presents in seven chapters the subject matter of a series of lectures designed to guide workers entering the 'almost undeveloped' field of cytochemistry . . . The book is blessed with a readability reminiscent of the informal discoursive scientific writing of half a century ago." *Harold C. Hodge.*

Deitrick, John E., & **Berson,** R. C.

Medical schools in the United States at mid-century. 388p. 1953. McGraw, New York, $4.50.

Hospital management, Oct. 1953, p.16. 2⅛ col.

"The formal report of the Survey of Medical Education, organized in 1947 and participated in by leading educators. A factual analysis and evaluation of current medical education, it is based on information and opinions obtained from representative deans, faculties and medical students throughout the United States. The book, indispensable as an addition to any reference library, also possesses interest for the general reader, since it deals with a topic so closely connected with the nation's health, in which almost everyone is interested. Beyond this, however, it has special interest for the administrators and staff personnel of teaching hospitals, or institutions which are contemplating such a relationship with a medical school . . . Heartily recommended for the challenges it presents and the forthrightness of its conclusions and recommendations." *F. J. D.*

Dooley, Marion S., & **Rappaport,** Josephine.

Pharmacology and therapeutics in nursing. Ed.2. 486p. 1953. McGraw, New York, $4.50.

Journal of the American Pharmaceutical Association, scientific edition, Nov. 1953, p.706. ¼ col.

"A relatively elementary textbook designed

for nurses. The treatment of the subject of pharmacology in this textbook, however, when compared with earlier textbooks with a similar aim, reflects the advances in the academic training of nurses during recent years . . . Designed in such a way that pharmacists might find it a useful reference book for use in refreshing their memories and obtaining information on the pharmacology of recently developed drugs such as the antibiotics and the antihistamines."

Duke, Neville, & **Lanchbery,** Edward.
Sound barrier; the story of high-speed flight. 117p. 1953. Cassell, London, 8s. 6d. net.

Engineering, Oct. 30, 1953, p.576. ½ col.
"The sub-title of this book . . . gives a truer picture of its scope than does the main title, for it aims at a survey of the whole field of aircraft-engineering development that has followed the introduction of the aircraft gas turbine, and is not at all concerned with the personal experiences of a test pilot who has many times flown 'through the sound barrier' . . . Intended for the general non-technical reader, 'to provide an insight into the manner in which the team of designer, aerodynamist [sic], engineer, physicist, and pilot plan the campaign for yet another conquest of the skies.' It is likely, in fact, that the book will appeal more to the reader who is already aeronautically-minded, as a concise and objective review of the present position of aeronautics . . . The lack of an index is a disadvantage."

Dunham, Clarence W.
Theory and practice of reinforced concrete. Ed.3. 499p. 1953. McGraw, New York, $7.

Contractors and engineers, Oct. 1953, p.25. ¼ col.
"Contains an introduction to ultimate load design and the analysis of prestressed concrete members, together with the straight line theory . . . Intended to give an undergraduate engineering student a working knowledge of design procedures, practical details, and the planning of construction . . . Includes recent developments in concrete technology, principles of planning precast concrete, and practical design problems."

Midwest engineer, Nov. 1953, p.29. ⅓ col.
"A very useful and well written text has been rewritten and enlarged to include the extensive developments in reinforced concrete in the last fourteen years. Each chapter has been revised to include newly developed material, more illustrative examples, and further and more detailed explanations. Chapters have been added on Forms, Precast Concrete, and Prestressed Concrete. The chapters on rigid frames and arches . . . are omitted." *B. A. W.*

Fildes, Paul, & **van Heyningen,** W. E., ed.
Nature of virus multiplication. 320p. 1953. Cambridge, New York, $6.50.

Journal of chemical education, Nov. 1953, p.594. ¾ col.
"Contains the 16 papers which formed a basis for discussion at the Second Symposium of the Society for General Microbiology held at Oxford University in April, 1952 . . . Granted . . . that no one will buy the book expecting to learn the secret of virus multiplication, it can be said that the volume does contain some excellent accounts of current ideas about virus multiplication, and that these ideas are based on the experimental results of a representative group of virus experts . . . Some of the discussions are both amusing and cogent, others are dull and seemingly irrelevant. Certainly, anyone actively interested in the field of virus research will want to browse through this book." *C. Arthur Knight.*

Fischer, George William.
Manual of the North American smut fungi. 343p. 1953. Ronald, New York, $8.75.

Journal of the Association of Official Agricultural Chemists, Aug. 15, 1953, p.1031. ½ p.
"Written primarily for those interested in plant pathology, mycology, or agronomy for the purpose of identifying the various forms of smut fungi found in North America. The data assembled . . . bring together the most recent facts known about the smuts, as well as those scattered through reports of earlier records. These data cover the description of 22 genera of smuts, including 276 species which are found on some 242 species of host genera . . . An outstanding feature . . . is the numerous illustrations of the spore forms of the smuts described . . . Well organized and the contents are presented in such a manner that it should prove a useful aid to all botanists and especially to those who specialize in the study of the smut fungi." *F. Allen Hodges.*

Gaddum, Leonard W., & **Knowles,** H. L.
Our physical environment; a problem approach. 625p. 1953. Houghton, Boston, $5.50.

Scientific monthly, Oct. 1953, p.219. ⅓ col.
"The authors of this textbook for an integrated course in the physical sciences voice two principal objectives: a comprehensive picture of man's physical environment, and the encouragement of reasoning ability . . . Attractively printed and illustrated. Important ideas and principles are set off in black-face type. The style is conventional. Difficulties are not sidestepped and important concepts . . . are adequately developed as they are needed, a feature that contributes to the integration . . . Should be a valuable aid in reaching the objectives set by the authors . . . An excellent addition to the list of textbooks on the physical sciences." *W. Paul Gilbert.*

Garvey, Laurence.
Learn about electricity. 126p. 1953. Foulsham, London, 6s. net.

Transactions of the Institute of Marine Engineers, Sept. 1953, *supplement,* p.6. ¼ col.
"Will be ideal for those whose interest in electricity is discouraged by too technical language, for it is written in the simplest straightforward manner, which can be easily understood by even the layman without previous knowledge of the subject. On the other hand, in the reviewer's opinion, this book would not be suitable to students who desire to obtain a thorough grounding in the subject of electricity with a view to serious study."

Giffen, Edmund, & **Muraszew,** A.
Atomisation of liquid fuels. 246p. 1953. Chapman & H., London, £1 16s.

Combustion, Nov. 1953, p.59. ½ col.

"Wherever liquid fuel is employed, whether in an internal-combustion engine or a furnace, atomization has most important bearing on the process of combustion. It has long been the subject of much research and numerous reports and papers have been published giving the results of such investigations, but the information is scattered and many gaps exist. Therefore, it was the purpose of the authors to select and correlate such of this information as they considered to be most useful in presenting a comprehensible picture of the mechanism of atomization."

Oil engine and gas turbine, Oct. 1953, p.223. ½ col.

"An entirely new book affording to those concerned with combustion a valuable summary of knowledge gathered from many quarters. Designers of oil engines and gas turbines obviously need this."

Goodger, E. M.

Petroleum and performance. 295p. 1953. Butterworths Scientific Publications, Ltd., Bell Yard, Temple Bar, London, W.C.2, 32s. 6d.

Chemical age, Oct. 17, 1953, p.811. 1 col.

"Although this book is well written, well illustrated and contains much useful information on fuels and their performance in engines, a better title might have been 'Fuels, Their Origin, Production, and Performance in Internal Combustion Engines' . . . Will be of great use to both the petroleum and automobile engineer, as well as forming an admirable introduction to those engaged in fuel research." *E. J. C.*

Goodnow, Minnie.

Nursing history. Ed.9. 440p. 1953. Saunders, Philadelphia, $3.75.

American journal of nursing, Nov. 1953, p.1310. ½ col.

"Some of the illustrations have been replaced with new ones. Many of the footnotes of the previous editions have been incorporated into the body of the text which makes reading easier. Changes and additions have been made to include the events of the last four years . . . As in the past, the late Miss Goodnow provided a brief, impartial, interesting picture of the development of nursing from early times to the present." *Olive A. Slocum.*

Nursing outlook, Sept. 1953, p.492. ½ col.

"The preface . . . provides a chronology of general history dating from 6000 B.C., to 1950 A.D., and a chronology of nursing history dating from 1300 B.C. to 1950 A.D. . . . Each chapter concludes with important dates, a summary, and a bibliograpy." *Mary Ella Chayer.*

Gray, C. H.

The bile pigments. 142p. 1953. Methuen, London, 9s. 6d. net. (Methuen's monographs on biochemical subjects.) (Wiley, New York, $1.75.)

Journal of chemical education, Oct. 1953, p.538. ⅝ col.

"Gives a summary of the present knowledge of the chemistry of the bile pigments and a critical presentation of their physiological significance in normal and pathological conditions. The author is an active research worker on bile pigment problems." *F. A. Cajori.*

Science progress, Oct. 1953, p.737. ⅝ p.

"Highly specialised though this Monograph is . . . it is authoritative, as its author's name guarantees, up-to-date, some of the references being as recent as 1952, and exhaustive to an astonishing degree for a book of only 137 small pages. It even has 4 pages of index . . . Astonishing value and masterly condensation are once more exemplified in this Methuen's monograph." *A. L. Bacharach.*

Gray, James.

How animals move. 114p. 1953. Cambridge, New York, $3.

Annals and magazine of natural history, Oct. 1953, p.800. ¼ p.

"Professor James Gray . . . takes his readers at first through certain simple laws of mechanics. He shows how evolution may account for the development of efficient organs of locomotion . . . An excellently produced book, worthy of any library or bookshelf. The illustrations by Edward Bawden clearly demonstrate animal locomotion in all its varying aspects." *M. C. M.*

Natural history, Nov. 1953, p.431. ¾ col.

"James Gray's aim was to explain the principal features of animal locomotion for readers without any previous biological knowledge . . . By means of photographs and some 70 illustrations and diagrams by Edward Bawden, we see how the rhythmical machinery of animals operates and propels them into action . . . Simple and easily understood and will encourage you to observe the motion of animals on your own with far greater interest than in the past." *George G. Goodwin.*

Greenstein, Jesse P. See **Advances** in cancer research.

Haber, Heinz.

Man in space. 291p. 1953. Bobbs, Indianapolis, $3.75.

Journal of the Franklin Institute, Oct. 1953, p.383. 1½ col.

"An analysis of the physical and psychological hazards which man faces in leaving the earth . . . Much of what is written is speculative and to the credit of the author he firmly and definitely indicates this in his writings . . . A well written book which merits and will probably receive wide circulation. It is the only book which has listed in it the complete problem which man will encounter in space and the chances for the survival under these hazardous conditions." *I. M. Levitt.*

Haddow, Alexander. See **Advances** in cancer research.

Hallows, Ralph W., & **Milward,** H. K.

Introduction to valves. 152p. 1953. Iliffe, London, 8s. 6d.

Electrical review, Oct. 9, 1953, p.777. ½ col.

"Describes the principles of operation of the radio valve and its uses in circuits of various types . . . Although this book does not attempt to provide more than a general introduction to this large and complex subject, the reader is given an excellent grounding in a clear and concise form, and the technical level is sufficiently advanced to make the work useful to the more knowledgeable radio student as well as to the novice."

Electrical times, Oct. 22, 1953, p.778. ¼ col.

"Though valves are at the heart of electronics, it is somewhat difficult to find a book which will offer a satisfying description of their operation and construction without going into the isoteric details which interest only the specialist. The present volume fills this gap admirably, and although its main concern is throughout with radio, it should prove extremely useful to the power engineer who is having to turn his attention to electronic circuits."

Radio & television news, Dec. 1953, p.88. ⅓ col.

"A basic work which covers the fundamental concepts of tube operation in various types of circuits . . . Lavishly illustrated . . . While some knowledge of mathematical processes would be helpful to the reader, the text is clearly and simply written so that the student may gain the maximum benefit from his studies. Although the terminology is British, the United States reader should have no difficulty in making the transition."

Hinshelwood, C., and others.

Chemistry and man; based on four lectures delivered under the auspices of the Chemical Council. 88p. 1953. E. & F. N. Spon, London, 7s. 6d.

Chemistry & industry, Oct. 10, 1953, p.1093. ⅓ col.

"The authorship of each lecture is a guarantee of the contents and it can be added with confidence that the style is both readable and understandable to any intelligent reader. The four lectures are: Chemistry and Modern Thought; Chemistry and the Amenities of Life; Chemistry and Food; and Chemistry and the Conquest of Disease."

Holland, J. L., and others.

Surveying. 2v. 590p. Virtue, London, £3 3s. net.

Colliery guardian, Oct. 1, 1953, p.428. ¼ col.

"Comprehensive and generously illustrated . . . Intended to help the student to prepare for the various official examinations, and anyone able to work through these volumes should have no difficulty in the examinations. The first volume deals mainly with the apparatus and practices in more general use, while vol. 2 is concerned with the more advanced side of the subject. However, the transition from the elementary to the complex is so clearly marked that few readers should fall by the wayside."

Hopton, G. U.

Cooling, washing and purification of coal gas. 123p. 1953. North Thames Gas Board, London, 6s. 4d.

Chemistry & industry, Oct. 17, 1953, p.1109. ½ col.

"The author has contrived to compress into this little book almost all the relevant theory and practice of the treatment of coal gas from the point it leaves the retort or oven outlet to its entry into the supply main . . . Emphasis is laid on the work for which the author and his colleagues are personally responsible . . . Records in simple language the impact of theoretical considerations upon their practical application . . . Should form a useful vademecum for the gas engineer, the gas works chemist and the chemical engineer engaged in the design of gas making plant." *R. Lessing.*

Hotchkiss, A. G., & **Webber**, H. M.

Protective atmospheres. 341p. 1953. Wiley, New York, $7.

Combustion, Nov. 1953, p.58. ½ col.

"Based on actual industrial experience, this book . . . is intended to give information on practical manufacturing operations."

Glass industry, Nov. 1953, p.637. ⅓ col.

"This new book, written especially for plant and process engineers, provides a concise survey of the properties, applications, generation methods and results of atmospheric gases. Based on a series of articles that first appeared in the *General Electric Review*, the volume adds new material, as well as coordinating previously scattered information . . . Particularly important are the chapters headed 'Distribution and Handling of Gases' and 'Remedies for Protective Atmosphere Ailments'."

Hume, H. Harold.

Hollies. 242p. 1953. Macmillan, New York, $6.75.

Natural history, Oct. 1953, p.343. ⅔ col.

"The first book ever written on hollies in this country and the first authoritative book to appear since W. Dallimore's *Holly, Yew and Box*, published in England in 1908 . . . Because of Dr. Hume's easy style, *Hollies* is useful to the amateur and professional alike. His information on methods of culture, propagation, commercial holly growing, and even the future possibilities of hybridizing, are good. Anyone contemplating the acquisition of holly would be doing himself a service by first reading this book." *F. Leighton Meserve.*

Nature magazine, Nov. 1953, p.454. 9 l.

"The author treats with the various landscape uses of the hollies and all aspects of the culture and care of them. Much history, also, is woven into the interesting and informative text."

Soil science, Oct. 1953, p.318. 11 l.

"Said to be 'the first horticultural book devoted to the subject' . . . Starting with the early history of holly and its botany, the author discusses the American, English, Chinese, and Japanese varieties in detail. Planting, propagation, pollination, culture, values, orcharding, and pest control are covered. One chapter deals with noteworthy hollies . . . A very attractive and interesting book."

Jacob, Kenneth D., ed.

Fertilizer technology and resources in the United States. 454p. 1953. Academic Press, New York, $8.50. (American Society of Agronomy. Agronomy, a series of monographs, v.3.)

Soil science, Oct. 1953, p.317. ⅓ p.

"The material contained . . . was first presented as a 'Short Course in Fertilizer Technology' at the University of Maryland, August 21-25, 1950, which was sponsored by the Soil Science Society of America . . . The 14 chapters cover the chemistry, production, and tonnages of nitrogen, phosphorus, and potassium fertilizer materials, and the manufacture of mixed fertilizers, with a final chapter on special fertilizers, special uses for fertilizers, and nonfertilizer sources of plant nutrients. A carefully selected bibliography is appended to

each chapter . . . The most inclusive and well-developed presentation of this subject that has been published, and it fills a highly important need."

Jacobson, Nathan.

Lectures in abstract algebra. 3v. v.2: Linear algebra. 280p. 1953. Van Nostrand, New York, $5.85.

Mathematical reviews, Oct. 1953, p.837. ⅜ col.

"The book adopts basically the abstract conceptual viewpoint, but often uses calculational and constructive methods. Expositions are elegant, and are full of new ideas and techniques even when classical results are dealt with. There are many exercises of much interest." *T. Nakayama.*

Jenkins, Glenn L., and others.

Quantitative pharmaceutical chemistry. Ed.4, revised. 534p. 1953. McGraw, New York, $6.50.

Canadian pharmaceutical journal, Oct. 15, 1953, p.723. ⅓ col.

"Control chemistry in the pharmaceutical field has taken on more and more importance in the last decade and this textbook has been completely revised in the light of that development. Changes in the official methods of analysis of pharmaceutical materials have been made in the 14th U.S.P. and in the Ninth National Formulary. The detailed procedures and discussion have been changed or rewritten in the present edition to conform to the revised official methods."

Ketelaar, J. A. A.

Chemical constitution; translated from the second Dutch edition by L. C. Jackson. 398p. 1953. Elsevier, New York, $6.50.

Industrial chemist, Oct. 1953, p.503. 1½ col.

"Professor Ketelaar's work on problems connected with chemical binding is well-known, and he is well-equipped to tackle the great problem of systematising descriptive chemistry in terms of the kinds of bonds between atoms, ions and molecules . . . Dr. Jackson's translation passes the one real test, that is, one can read the book almost without realising the fact that it *is* a translation." *A. K. Holliday.*

Journal of the Franklin Institute, Sept. 1953, p.290. 1 col.

"This book is certainly to be recommended for those having some background and a definite interest in this theoretical but forward-looking subject. No other text so thoroughly covers this material. The author, in discussing not only his viewpoints but those of others, which in some cases are considerably different, gives a well-rounded advanced picture of the field. It appears that the book suffers in translation, at least in spots." *Marlyn H. Bortner.*

Kiely, D. G.

Dielectric aerials. 132p. 1953. Methuen, London, 8s. 6d. (Methuen's monographs on physical subjects.) (Wiley, New York, $2.)

Electronic engineering, Oct. 1953, p.438. ⅝ col.

"Too much work has to be done before dielectric aerials can be fully understood for it to be possible to write a textbook on the subject and, as the author points out, this monograph is to be regarded rather as a critical essay . . . This book is of value in that it brings together material which was previously only available in references, many of which are not accessible to the ordinary research worker." *J. Brown.*

Electronics, Nov. 1953, p.453. ⅔ col.

"A most interesting monograph on a subject about which too little is known . . . For the most part the monograph deals with the mathematical attempts to analyze the action of nonmetallic rod, cylinder and horn antennas. Many pages are intensely mathematical, but for the reader not interested in these attempts to come to a full understanding of the radiation phenomena from dielectric antennas, there is much of interest and value. The experimental results of the investigators are described. The electrical, mechanical advantages and disadvantages of dielectric aerials make for thoughtful reading and cogitation." *K. H.*

Journal of the Franklin Institute, Nov. 1953, p.481. 1⅛ col.

"Collects the scattered literature, presents a general review of existing theoretical and experimental work concerned with radiation pattern characteristics, derives mathematical expressions for them, and points out directions in which additional theoretical and experimental work should be done. The volume serves its purpose well as a critical review of the field allowing the reader to obtain a broad picture of present developments with comparatively little expenditure of effort . . . Physicists and engineers who are concerned with the design of centrimetric radiators would do well to read this monograph." *S. Charp.*

Radio & television news, Nov. 1953, *radio-electronic engineering section,* p.30. ⅔ col.

"Provides a critical review of the existing theoretical and experimental work on radiation pattern characteristics and the derivation of mathematical expressions for them. Information useful for practical design has been included . . . Addressed primarily to physicists and engineers who are not specialists in aerials, although the experienced aerial designer may find the design data useful for future applications."

Knowles, Francis G. W.

Freshwater and salt-water aquaria. 174p. 1953. British Bk. Centre, Inc., 420 W. 45th St., New York, $2.75.

Nature magazine, Oct. 1953, p.398. 6 l.

"A practical guide to setting up, stocking and maintaining either a freshwater or a salt-water aquarium. Although published in Great Britain, the information contained . . . is largely applicable to situations in the United States."

Kohnke, Helmut.

Soil science simplified. 66p. 1953. The Author, Purdue Univ., W. Lafayette, Ind., $1 unbound.

Journal of soil and water conservation, Sept. 1953, p.246. ⅔ col.

"The booklet has only 66 pages, and the author has placed in it the important facts on physical, chemical, and biological aspects of soil, soil-water relations, and soil-plant growth relations. There are, in addition, concise informative chapters on soil classification, soil erosion, soil and crop management, and soil conservation . . . He succeeds, in giving a

quick over-all picture of the subject. His presentation is clear and well organized with numerous tabular listings and diagrams. Soil Conservationists and others will find *Soil Science Simplified* interesting and useful. It gives a short course in modern soil technology in quick readable form." *Arnold J. Bauer.*

Soil science, Oct. 1953, p.320. S 1.

"The author attempts to reduce soil science to the bare essentials. The 10 chapters are headed: nature and function of soil, physical properties, soil and water, chemical properties, plant growth and nutrition, organic matter and microbes, soil classification, erosion, soil and crop management, and conservation. The illustrations are largely drawings. The presentation is concise and to the point. Presumably the author assumes that the reader is well trained in science. Others will have considerable difficulty in following the development of the subject."

Lawrence, J. Stewart, and others.

Sulphonamides and antibiotics in man and animals. Ed.2. 482p. 1953. H. K. Lewis, London, 42s. net.

Nature, Oct. 10, 1953, p.644. ⅔ col.

"Dr. J. Stewart Lawrence and Prof. John Francis and their colleagues have set themselves the difficult task of providing a guide to the use of these new drugs in the treatment of bacterial infections in man and animals. The plan which they have adopted in this book . . . is, after a discussion of general principles, to pass to the sulphonamides in general and individually, and from there to a separate chapter on drugs used for the treatment of leprosy and tuberculosis, the sulphones, thiosemicarbazones and *para*-aminosalicylic acid. Antibiotics in current use, penicillin, streptomycin, neomycin, chloramphenicol, and aureomycin and terramycin are considered next, and most of the remainder of the book is devoted to a discussion of the clinical use of all these agents." *R. A. Shooter.*

Le Févre, Raymond J. W.

Dipole moments. Ed.3, revised and reset. 140p. 1953. Methuen, London, 8s. 6d. (Methuen's monographs on physical subjects.) (Wiley, New York, $2.)

Chemical age, Oct. 31, 1953, p.919. 1⅙ col.

"Although the publishers claim that the book is intended for honours students and for workers in other branches of science, the author makes no bones of the fact that his efforts are directed towards helping an ordinary research worker to make useful measurements of dipole moments and to begin the interpretation of them. The truth is that both aims, in the small compass of 140 pages, are surprisingly fully met . . . The author has not rewritten the book nor materially altered the presentation of the contents. Instead, he has contented himself with bringing each section up to date by the addition of appropriate new matter. Although a casual glance, therefore, will reveal little change, a re-reading will bring to light a fair amount of new and interesting material . . . A masterpiece of compression. Its continued usefulness both to university students at degree level and to research workers in the field of dielectrics is not in doubt." *R. C. Pink.*

Linsdale, Jean M., & **Tomich,** P. Q.

A herd of mule deer. 567p. 1953. Univ. of California Press, Berkeley, Calif., $8.50.

Natural history, Nov. 1953, p.431. ¼ col.

"This beautifully prepared, printed, illustrated, and wholly comprehensive monograph is devoted to the broad subject of animal behavior. In it the activities of mule deer in relation to their environment appear to have been treated from every imaginable angle . . . Besides containing much new data, the book is a vast reservoir into which the authors have packed everything they have been able to discover relating to our knowledge of the mule deer. The index alone occupies nine pages." *G. H. H. Tate.*

Loomis, Lynn H.

Introduction to abstract harmonic analysis. 190p. 1953. Van Nostrand, New York, $5.

Mathematical reviews, Oct. 1953, p.883. ⅛ col.

"'An outcome of a course given at Harvard first by G. W. Mackey and later by the author'. It gives a self-contained exposition of Gelfand's theory of (commutative) Banach algebras and its application to harmonic analysis on locally compact abelian groups. No special prerequisites are assumed in the readers other than elementary modern algebra and Liouville's theorem from the theory of analytic functions. The contents are as follows. I: Topology. II: Banach spaces. III: Integration. IV: Banach algebras. V: Some special Banach algebras. VI: The Haar integral. VII: Locally compact abelian groups. VIII: Compact groups and almost periodic functions. IX: Some further developments." *K. Yosida.*

Lucas, Walter A.

Pocket guide to American locomotives. 290p. 1953. Simmons-Boardman, New York, $4.50.

Railway age, Sept. 21, 1953, p.120. ½ col.

"Describes and illustrates practically every type of steam, diesel and electric locomotive now or recently in service on United States and Canadian railroads . . . Written in response to popular demand for an illustrated guide book that will provide the model maker with a single source of motive power information, and that will supply the railfan with a handy reference volume containing photographs and detailed data on just about every locomotive he is apt to see on American railroads. But it is, also, a basic book that professional railroaders will welcome as a convenient up-to-date survey of all types of modern motive power."

Luder, W. F., and others.

General chemistry. 595p. 1953. Saunders, Philadelphia, $6.

Chemical age, Oct. 17, 1953, p.811. 2⅛ col.

"Would seem to be designed for use by freshman classes and aimed at the presentation of a general survey of inorganic, organic and physical chemistry. The authors have tried to include recent developments and sufficient historical background to give some understanding of scientific methods . . . Well printed and bound and there are many clear diagrams and a good index. The price is not excessive." *W. R. M.*

McAdam, Robert.

Colliery surveying. 146p. 1953. Oliver, Edinburgh, 12s. 6d.

Colliery guardian, Nov. 5, 1953, p.581. ⅛ col.

"Book shows . . . precision, lucidity of expression and fine draughtsmanship . . . Intended to guide the student through the complexities of a subject which is responsible for more failures in examinations than any other . . . Intended principally for students studying for the Colliery Managers' and Undermanagers' Certificates of Competency, and the new National Certificate in Mining."

Iron & coal trades review, Oct. 2, 1953, p.792. ¼ col.

"Covers such subjects as chain and compass surveying, levelling, calculation of areas and volumes, dip and fault problems and theodolite surveying. Carefully selected questions set at previous statutory examination papers are appended at the end of each chapter. Tables, calculation formulæ of solid figures, and various types of lettering used in the preparation of mine plans, round off an excellent textbook which should be a useful addition to any mining students' library."

Macfarlane, James E.

D.C. generators and motors. 99p. 1953. Pitman, London, 8s. 6d. (Elementary electrical engineering practice series.)

Electrical review, Oct. 9, 1953, p.777. ⅜ col.

"There has long been a need for a simple and concisely written book such as this providing an introduction to d.c. machines for those who are not suitably equipped to study the more advanced text-books. It should be of particular value to students studying for the Ordinary National Certificates and to all who are engaged in electrical installation work . . . This book certainly gives the reader his money's worth and should provide him with a firm foundation for continued study." *R. P.*

MacNiece, E. H.

Industrial specifications. 158p. 1953. Wiley, New York, $4.50.

Advanced management, Oct. 1953, p.32. ⅛ col.

"It is our guess that this book will find its way to top management people as well as other levels in any plant where laboratory people are working for better specifications, lower production costs, etc. It is a book that will be used more often than your dictionary. It is a good book, a really great book that will be welcomed by thousands who are seeking better ways to achieve quality control."

Canadian machinery and manufacturing news, Nov. 1953, p.214. ⅛ col.

"The author is especially aware of the relationship between technical and economic production factors, as well as the human aspects of buyer and seller. These considerations underlie his discussions of variability and tolerance, raw-material specifications, process and product specifications, and governmental specifications, all enlivened by actual orders that have been issued by leading business concerns and government agencies."

Plant engineering, Nov. 1953, p.188. ⅛ col.

"Planning, writing and issuing specifications for the various phases of industrial operations are the subjects of this book written by Mr. MacNiece in an effort to provide and encourage accurate methods of statistical quality control."

Product engineering, Nov. 1953, p.292, 294. ⅛ col.

"The author sets forth proven methods of planning, writing, and issuing specifications for the various phases of industrial operation, providing the basic information necessary for the advanced application of these methods. It is the only work to deal with this important area of modern industrial engineering . . . 'Industrial Specifications' offer total coverage of the subject."

Massey, H. S. W.

Atoms and energy. 174p. 1953. Elek, London, 16s. net.

Transactions of the Institute of Marine Engineers, Sept. 1953, *supplement*, p.6. ¼ col.

"Gives a non-technical account of the developments in atomic physics which led up to the large scale release of atomic energy . . . Although the relation of atomic research to atomic energy forms the central subject of the book, special attention has been paid to a description of the nature of the research methods used in modern physics. The final chapter gives an account of the researches going on at present to elucidate the nature of the fundamental particles—electrons, protons, neutrons, pi-, mu- and V-mesons and neutrinos—without any reference to applications."

Mitchell, John, jr. See **Organic** analysis.

Morse, Frederick T.

Power plant engineering. Ed.3, revised. 687p. 1953. Van Nostrand, New York, $8.75.

Midwest engineer, Oct. 1953, p.29. ⅜ col.

"The difference in content and presentation of material . . . could be cause to consider this more than a revision, possibly a new book . . . A number of examples throughout the book, together with problems at the ends of the chapters, serve to increase the value of the book as a college text. Practicing engineers interested in the power field should find this book a valuable addition to their library." *R. G. O.*

Power, Nov. 1953, p.230, 232. ⅛ col.

"The former chapters on hydraulic power and electrical equipment have been dropped. The space thus released has been used for greater coverage of steam-plant equipment and information on gas-turbine plants and nuclear energy . . . Strives to present a thorough study of stationary power and heating plants, including public service, industrial and institutional types."

National Cotton Council.

Cotton from field to fabric. Ed.2. 62p. 1953. The Council, Box 18, Memphis, Tenn., $3.25 unbound.

Textile world, Nov. 1953, p.200. ¼ col.

"Intended as a readable textbook for the textile merchant, retailer, technician, teacher, and student. It tells how cotton is grown, harvested, ginned, spun, woven, and finished. Chapters have been added on cotton futures, knitting, and nonwoven fabrics. The book has little to offer for the specialized technician in his own field, but it does provide readable technical information for the general reader."

Nicholas, D. J. D.

Chemical tissue tests for determining the mineral status of plants in the field. 33p. 1953. Tintometer, Ltd., Salisbury, 8s. 6d.

International sugar journal, Oct. 1953, p.283. ⅓ col.

"Provides a detailed account of the techniques employed for the estimation of nitrate, phosphate, potassium, chloride, magnesium, calcium, manganese (both at toxicity and deficiency levels), aluminium, heavy metals (copper, zinc, cobalt, nickel, etc. together), copper, iron, nickel, zinc and lead. The descriptions start from sampling techniques, preparation of samples and extractants, and proceed through the complete analysis procedures . . . With its useful bibliography, excellent printing and paper, the volume is a thoroughly workmanlike presentation reflecting credit on both author and publishers."

Noble, Royce J.

Latex in industry. Ed.2. 912p. Rubber Age, 250 W. 57th St., New York, $15 (Foreign, $16).

Textile world, Nov. 1953, p.200, 202. ⅓ col.

"The progress made in latex applications . . . has made it necessary to rewrite some chapters and revise others . . . The contribution of this book is its value as a source of reference. The bibliography at the end of each chapter usually covers more pages than the chapter itself. There are 22 pages of bibliography on the impregnation of latex and 49 pages on the properties of latex. At the end of the book, an excellent author-and-subject index completes the reference guide. What this book doesn't tell you, it tells you where to find."

Organic analysis; edited by John Mitchell, jr. and others. v.1. 473p. 1953. Interscience Publishers, New York, $8.50.

Journal of the American Pharmaceutical Association, scientific edition, Nov. 1953, p.706. ⅓ col.

"Judging from Volume I, this series should appeal strongly to practicing analytical and organic chemists, both in academic and industrial positions. The book appears to fill a need that has long existed and the publishers are to be congratulated upon their foresight in attempting to fill an important gap in this area of analytical chemistry."

Modern plastics, Nov. 1953, p.170. ⅓ col.

"Addressed to the practicing chemist and provides him with a survey of the important analytical methods used in functional group analysis, showing how a combination of chemical and physical techniques is utilized to solve various analysis problems."

Organic reactions; edited by Roger Adams. v.7. 440p. 1953. Wiley, New York, $9.

Chemical and engineering news, Oct. 19, 1953, p.4372. 1⅓ col.

"This volume is certain to acquire the same high esteem in the opinion of organic chemists that the preceding volumes attained." *Charles D. Hurd.*

Journal of the Association of Official Agricultural Chemists, Aug. 15, 1953, p.1036. ½ p.

"A chemist interested in a reaction described in this volume may be saved many hours of library searching. Enough detailed procedures illustrating the reactions are described that a chemist will probably need only to make minor adjustments in order to adapt a procedure to his own problem . . . A valuable addition to any chemical library." *Kenneth A. Freeman.*

Parrish, W., & Irwin, B. W.

Data for X-ray analysis. 3v. v.1, 100p.; v.2, 84p. 1953. North American Philips Co., Inc., Research & Control Instruments Div., 750 S. Fulton Ave., Mount Vernon, N. Y., $2 each.

American machinist, Oct. 12, 1953, p.324. ⅓ col.

"First volume of this three-volume series contains charts for solution of Bragg's equation. Charts cover K radiation for molybdenum, copper, cobalt, iron, and chromium. Also included is a table for converting minutes into decimals of a degree. Volume 2 contains tables for computing the lattice constant of cubic crystals. Tables give K radiation values for the square root of N times the wavelength divided by 2, for copper, nickel, cobalt, iron, and chromium. Also included are several other pertinent tables and a chart showing 33 representative cubic diffraction patterns. Volume 3, now in production, will give X-ray reflection angles for several standard substances."

Plesch, P. H., ed.

Cationic polymerisation and related complexes. 166p. 1953. Heffer, Cambridge, England, 20s.

Chemical age, Sept. 19, 1953, p.611. 1⅓ col.

"This book, consisting of the papers and discussions at a conference held in 1952, represents an up-to-date review of the subject . . . Divided into two parts, the first of which deals with complexes likely to be involved in polymerisation, the second part being devoted to cationic polymerisation mechanisms and processes . . . Provides a large amount of material in an accessible form, and while its primary value is to research workers in the field of polymerisation, it is of considerable interest to the high polymer chemist generally and to those interested in complex formation." *W. R. M.*

Modern plastics, Nov. 1953, p.170. ⅓ col.

"Some of the topics discussed are: Friedel-Crafts Complexes; interaction between aromatic substances and aluminum and hydrogen halides; complexes between olefins and metal halides; complexes of stannic chloride with water, ethanol, ether, and acetone; the general chemistry of olefin complexes with metallic salts; formation, structure, and reactivity of silver salt complexes; mechanism of the polymerization of styrene by antimonic chloride, using radioactive tracers; and many more."

SPE journal, Nov. 1953, p.24. ¼ col.

"Contains the proceedings of a conference held at the University College of North Staffordshire in March of 1952. There are 27 articles, dealing with complexes of metal salts with organic compounds, with cationic polymerization (mostly of styrene), and with other alkenes. This book is strictly for the practicing chemist, and performs an excellent service in rounding up much of the present day theory on the polymerization of unsaturates with metal ions . . . An important book for the polymer chemist."

Quigley, Martin, jr., ed.
New screen techniques. 208p. 1953. Quigley Pub. Co., Inc., Rockefeller Center, New York, $4.50.

Journal of the Society of Motion Picture and Television Engineers, Oct. 1953, p.561. ⅝ col.

"This potpourri of 26 illustrated articles is divided into two parts: Part I deals with the production and exhibition of stereoscopic motion pictures; Part II covers similar material in relation to the Cinerama and CinemaScope wide-screen systems . . . While this collection cannot be recommended as a source of information for engineers, it may well be of topical interest to many in our industry who want to be in touch in a general nontechnical way with developments in the stereoscopic field. It must be assumed that this is the audience for which the book was intended." *Arnold F. T. Kotis.*

Radio & television news, Oct. 1953, p.108. ¼ col.

"A compilation of articles written by leading authorities on all phases of three-dimensional screen and sound techniques. Included are papers on such subjects as 'Polaroid' and 3D films, basic principles of 3D photography and projection, 'Natural Vision,' the stereo window, 3D in Europe, Cinerama, Cinemascope, sound for Cinemascope, etc. . . Lavishly illustrated . . . Those concerned with all phases of movie film and sound will find this symposium of value."

Ramo, Simon, & **Whinnery,** J. R.
Fields and waves in modern radio. Ed.2. 576p. 1953. Wiley, New York, $8.75.

Radio & television news, Nov. 1953, *radio-electronic engineering section,* p.30. ⅔ col.

"Contains much new material designed to keep it the simplest yet most thorough treatment of the electromagnetic theory essential to a practical understanding of fields and waves in present-day radio . . . Revised for additional clarity, with some of the less useful parts being eliminated . . . Many problems have been added."

Tele-tech, Oct. 1953, p.189. ⅝ col.

"Practicing engineers and graduate students should find a wealth of highly useful information in this volume covering electromagnetic theory . . . Expanded by about 10%, allowing the inclusion of much current material on horns, slot antennas, paraboloids, and slow wave-guide structures. A complete new chapter on microwave networks has been added, and the rational mks system of units is used throughout . . . This book is quite comprehensive, and as a useful reference should prove a worthwhile addition to an engineer's library." *A. J. F.*

Reed, Henry R., & **Russell,** C. M.
Ultra high frequency propagation. 562p. 1953. Wiley, New York, $9.50.

Electrical news and engineering, Oct. 15, 1953, p.124. ⅓ col.

"The most recent information on new developments in the field of Ultra High Frequency radio wave propagation is offered for the first time . . . The system approach is emphasized here and consideration of the performance of the installation as a whole is given."

Radio & television news, Dec. 1953, *radio-electronic engineering section,* p.31. ⅔ col.

"An outgrowth of intensive experimental research carried on at the U. S. Naval Air Test Center, this book makes available to the general field of electrical engineering the most recent information on new developments in u.h.f. radio wave propagation—the most important single parameter of a u.h.f. communications system . . . Also reviews all related system parameters, emphasizing the system concept which considers the effect produced on the entire system by a variation of any one of its parts . . . As very little information on air-to-air and air-to-ground u.h.f. propagation has heretofore been published in usable form, the authors have attempted to include all such information as is presently available."

Richards, O. W.
The social insects. 219p. 1953. Philosophical Library, New York, $4.75.

Scientific monthly, Oct. 1953, p.221. ⅔ col.

"Provides an excellent, readable account of the behavior of the truly social insects . . . Illustrated with several diagrammatic drawings and numerous photographs. The emphasis is on British (or at least European) types of insects . . . [The author's] treatment of wasp behavior is the best that has been assembled in the relatively brief, easily read style of a semipopular book . . . On reading this book one is impressed not so much by items which might have been included, but by the great amount of material that Dr. Richards has been able to include in a short and thoroughly interesting book. We can recommend it not only to entomologists, but to the general reader as well." *Charles D. Michener.*

Soil science, Oct. 1953, p.319. ⅓ p.

"This book has to do with the community living of bees, wasps, ants, and termites. The private lives of these insects are discussed in detail . . . The first eight chapters are concerned primarily with the facts about the four groups of insects. The ninth and last chapter deals with family life, involving a group of offspring that surround the queen . . . A highly interesting and worthwhile book."

Ross, T. K.
Introduction to chemical engineering. 214p. 1953. Pitman, London, 21s. net.

Chemical age, Oct. 10, 1953, p.763. 1⅓ col.

"To the student who has a knowledge of physical chemistry this book will be of particular value when learning the fundamentals of chemical engineering. There are in all fifteen chapters, an appended bibliography, and a good index . . . Represents a useful addition to the published literature on chemical engineering. It may well form the basis of a chemical engineering course for students at both universities and technical colleges, and is good value for money." *E. J. C.*

Chemical trade journal and chemical engineer, Oct. 2, 1953, p.840. 1 col.

"The author . . . bases his treatment upon courses of lectures given to students at the South-west Essex Technical College and the West Ham Municipal College and in which the intention was to present a study of the chemical engineering methods to students who had recently completed a course in physical chemistry. In this attempt, Mr. Ross has, in the reviewer's opinion, been completely successful and whilst some preliminary fairly detailed knowledge of physical chemistry is undoubtedly of considerable advantage the book should be

found of high value by all students of chemical engineering from whatever direction they approach the subject."

Chemistry & industry, Oct. 17, 1953, p.1108. ⅛ col.

"An introduction to the subject for students who are grounded in physical chemistry . . . Based on the study of the unit operations . . . There can be no doubt of the value of this book to part-time students and the price should put it within the reach of all." *F. E. Warner.*

Rossini, Frederick D.

Selected values of physical and thermodynamic properties of hydrocarbons and related compounds. 1050p. 1953. Carnegie Press, Pittsburgh, $7.

American Petroleum Institute quarterly, Autumn 1953, p.46. ½ col.

"Includes a large amount of new data which has not been heretofore published . . . Should prove of inestimable value for all people working with hydrocarbon data. The values contained therein are accepted worldwide as the most authentic data available."

Roth, Charles B.

How to sell your way to success. 207p. 1953. McGraw, New York, $3.50.

Advanced management, Oct. 1953, p.32. ⅛ col.

"The basis of . . . [the author's] approach is the Formula—the 'master success formula which applies to every human contact you will make' . . . After stating this formula in Chapter I, the author proceeds to examine each of the factors in detail, writing in a clear, fast style that is sprinkled with colorful, illustrative anecdotes. Among other pertinent topics discussed . . . are the Development of a Sales Personality, the Art of Persuasion, How to Apply Knowledge to Human Nature, How to Manage Yourself in Selling."

Rothe, Frederick S.

Introduction to power system analysis. 187p. 1953. Wiley, New York, $5. (General Electric series.)

Electrical news and engineering, Oct. 15, 1953, p.124. ½ col.

"Consolidates all the basic tools of analysis developed over the past 20 years. The characteristics of each of the building blocks of the modern power system are examined . . . Many worked problems and examples are included at the end of each chapter, rounding out the broad coverage of this book and providing an excellent basis for advanced work in any phase of the subject. At the same time enough information to solve most of the work-a-day problems of the practicing power system engineer is available."

Southern power and industry, Nov. 1953, p.118. ¼ col.

"Considers the characteristics of each of the building blocks of the modern power system . . . Offers reliable information on such aspects of the field as synchronous machine theory; transformer theory; transmission line theory; symmetrical components, and stability. While the book covers problems associated with the fundamental operating frequency, transient behavior of the components of the system during disturbances is thoroughly investigated . . . Includes many worked examples and problems at the end of each chapter."

Rudin, Walter.

Principles of mathematical analysis. 227p. 1953. McGraw, New York, $5. (International series in pure and applied mathematics.)

Journal of the Franklin Institute, Oct. 1953, p.382. 2 col.

"Designed to serve the pure mathematicians, this book will also be a treat for the applied mathematician who can profit from such an experience. The topics . . . are selected judiciously from the vast field of advanced analysis of real and complex variables. The style is lucid, yet terse and powerful . . . This book's emphasis is on clarity of concepts with a minimum of recapitulation . . . There seems to exist a comfortable market for class room adoptions, but the volume appears also suitable for home study by the graduate student. In addition, it will be of value to research personnel in fields that require a ready reference to the many theorems of advanced mathematical analysis." *Carl Hammer.*

Sandeman, E. K.

Radio engineering. Ed.2, revised. v.2. 613p. 1953. Chapman & H., London, 55s. net.

Beama journal, Oct. 1953, p.344. ⅛ col.

"Since this book first appeared in 1949 it has come to be accepted as the standard work on the subject, and our original high commendation applies equally to this second edition . . . Apart from a large number of minor additions a 40-page section on transmission line filters and a clear statement of the method of calculating the noise factor of a receiver have been incorporated . . . The beginner will benefit from the logical sequence and the clear exposition, while the 72-page bibliography and compresensive index make the book a valuable work of reference for the man of experience. Radar and television are not covered, but much of the text is relevant to these subjects also."

British journal of applied physics, Nov. 1953, p.351. 10 l.

"Opportunity has been taken to make a number of minor alterations in the text, to insert a short section on the calculation of the noise factor of a receiver and a longer section of 30 pages on transmission line filters." *T. B. Rymer.*

Schnell, Leroy H., & **Crawford,** M. G.

Solid geometry; a clear thinking approach. 198p. 1953. McGraw, New York, $3.20.

School science and mathematics, Nov. 1953, p.672. ⅔ p.

"Commendable features . . . include: emphasis on student discovery which results from encouraging student to develop proofs independently wherever feasible; the excellent tests and reviews found at the end of each chapter and the careful attention which is given to helping the student to develop skill in three dimensional drawings. On the other hand, one cannot say that this text supplies the abundance of material necessary to allow the teacher to select whatever is required to meet class needs. Indeed there are sections where some teachers might find it desirable to supplement the problem materials provided. This book, moreover, does not show the effect of classroom experimentation to the extent manifest in its prede-

cessor in Plane Geometry . . . Deserves examination by anyone considering a new text book in Solid Geometry." *Frank B. Allen.*

Scott Blair, G. W.

Foodstuffs; their plasticity, fluidity and consistency. 264p. 1953. Interscience Publishers, New York, $7.25.

Dairy science abstracts, Nov. 1953, p.917. 7 l.

"This interesting book contains comprehensive chapters on the rheology of milk, cream, ice cream mixes and similar products . . . the consistency of butter . . . and the rheology of cheese and curd . . . A comprehensive bibliography of the literature is given at the end of the book." *E. J. M.*

Food, Nov. 1953, p.469. ⅘ col.

"The book should commend itself to students of rheology generally, and should certainly take its place on the bookshelves of the growing number of physicists in the food industry today. Its publication focuses attention on the importance of studying the physical properties of foodstuffs, which too often are neglected in favour of the nutritional aspects." *A. M. L.*

Food engineering, Oct. 1953, p.243. ⅓ col.

"Offers a clear and up-to-date treatment of one of the most important facets of nutrition by experts in the starch, cereals, honey, and dairy products industries. The effect of food composition—fluidity, plasticity, and consistency—on chemical and bacteriological processes, and on all-important quality control, are explained fully in this authoritative work . . . Indexed according to author and subject, book contains an exhaustive bibliography and is illustrated with charts and photographs."

Sears, Francis Weston.

Introduction to thermodynamics, the kinetic theory of gases, and statistical mechanics. Ed.2. 374p. 1953. Addison-Wesley Press, Cambridge, Mass., $7.50.

American journal of physics, Oct. 1953, p.580. 1¼ col.

"Written 'to bring together under one cover, and at an intermediate level, a presentation of the fundamental principles' of thermodynamics, kinetic theory of gases, and statistical mechanics . . . In general, these subjects are adequately and lucidly presented . . . The few editing errors of the first edition have been corrected, but a few more new ones appear in the added material." *Boris Leaf & A. B. Cardwell.*

Seranne, Ann.

Your home freezer. 222p. 1953. Doubleday, New York, $3.75.

Journal of the American Dietetic Association, Oct. 1953, p.1032. ⅓ col.

"This book, succinctly written, is an aid to either the novice or the person experienced in the procedures of freezing. The usual topics are discussed: buying the right freezer; packaging materials; freezing meat, game, poultry, fish, and sea food; freezing vegetables, fruits, dairy products, bakery products, and ready-cooked foods and leftovers. Recipes are included, too, as are proposed menus for 'freezer meals' . . . There is no doubt that this book would be a valuable reference to one interested in the home freezing of food." *Margene Wagstaff.*

Settel, Irving, & **Glenn,** Norman.

Television advertising and production handbook. 480p. 1953. Crowell, New York, $6.

Journal of the Society of Motion Picture and Television Engineers, Oct. 1953, p.562. 1 col.

"Written and compiled to assist those interested in any phase of planning, setting up and operating a television station . . . All fields are covered . . . from the methods of computing the cost of installation and operation of all types of stations through research, national and local selling, mail order programs, staging, producing, casting, publicity and censorship to the methods of obtaining personnel . . . Will be of interest to anyone contemplating a career in television but will have its greatest value to prospective owners, managers, agency executives, promotional managers and producers . . . Would make an excellent text for college or extension courses in these fields." *William K. Aughenbaugh.*

Sexton, W. A.

Chemical constitution and biological activity. Ed.2, revised. 424p. 1953. E. & F. N. Spon, London, 60s.

Chemistry & industry, Oct. 17, 1953, p.1108. 1⅛ col.

"A great quantity of new facts, a large number of useful new drugs and biologically active substances, and some few, but valuable additions to the knowledge of fundamental principles of chemotherapy have been added . . . The plan of the first edition has been retained, but practically all the chapters have received some rewriting and the literature references have generally been brought up to the end of 1951, with later references to a few outstanding papers published since then. Some chapters have been much improved . . . All chemists and biological workers who are interested in the mode of action of chemical agents on living cells, whether in its practical or theoretical aspects, are warmly recommended to obtain this book, which in its new edition will be even more useful to them than before." *F. Dickens.*

Endeavour, Oct. 1953, p.218. ⅔ col.

"The principal alterations concern the biochemistry of the purines and pterins, the mechanism of transmethylation, the new antimalarial substances, naturally occurring antibiotics, organo-phosphorus insecticides, and cancer and plant-growth regulators. The author's pleasant and lucid style enhances the fascination of an intrinsically fascinating subject."

Skolnik, David, & **Hartley,** M. C.

Dynamic solid geometry. 231p. 1952. Van Nostrand, New York, $2.48.

School science and mathematics, Oct. 1953, p.583. ⅓ p.

"Although the author emphasizes that this text is suitable for a course which emphasizes originals and numerical exercises rather than proofs of propositions, the reviewer's impression was that the book tends toward the traditional approach which emphasizes logical proofs . . . As with any text, the teacher should make a careful examination before adopting—this one is certainly above average." *Cecil B. Read.*

Smith, Hubert Shirley.
The world's great bridges. 180p. 1953. Phoenix House, Ltd., 38 William IV St., Charing Cross, London, W.C.2, 15s. net.

Engineering, Oct. 30, 1953, p.546. ⅝ col.

"'Written for all those interested in bridges, whether young or old, engineers or laymen' . . . Mr. Shirley Smith has succeeded in reviewing the famous bridges of all time practically without recourse to technical jargon; where such words are used, a brief definition helps the uninitiated to a fuller understanding . . . To engineers, the book will provide one of the few . . . histories and reviews of their craft and profession . . . Gives an insight into the problems of designing and constructing a great bridge; it indicates the variety of materials that the engineer now has at his disposal, each best suited to a particular purpose; and it tries to express, to the laymen, the immense satisfaction the engineer himself enjoys in the construction of a great bridge."

Model engineer, Oct. 15, 1953, p.458. ⅖ col.

"This . . . book by one who is, perhaps, the greatest designer of bridges in our time, relates the story of bridge-building from the earliest times. The historical account is extremely interesting and leads into descriptions of the great bridges that have since been built in various parts of the world. There are forty-three half-tone illustrations and twenty-four line drawings . . . The final pages are devoted to a useful and comprehensive index. The book bids fair to become the most important non-technical treatise in its subject."

Spalton, Laurence M.
Pharmaceutical emulsions and emulsifying agents. Ed.2. 138p. 1953. "The Chemist & Druggist", London, 7s. 6d.

Chemical trade journal and chemical engineer, Oct. 23, 1953, p.1032. ¼ col.

"This practical epitome of information on the numerous emulsifying agents now available in pharmacy, will also probably be found of value by readers with other interests, for example, in cosmetics. The theory is presented in a simplified form . . . [and] the practical treatment is comprehensive . . . This second edition has been improved by a serviceable cloth-bound cover and the addition of a complete index to the text."

Stewart, Jeffrey R.
Stewart's scientific dictionary. Ed.4, of "The National Paint Dictionary". 788p. 1953. Stewart Research Laboratory, Alexandria, Va., $10.50 (Foreign, $12.50).

Modern plastics, Dec. 1953, p.154. ⅜ col.

"In a strictly alphabetical listing, the volume presents definitions and descriptions of basic scientific terms, compounds, trade-named and proprietary chemicals, tests, instrumentation, and general chemical and physical properties. In many cases, the manufacturers of compounds and equipment are listed. Though not all-inclusive, the volume nevertheless presents a fairly exhaustive compilation of terms generally used in the chemical process industries."

Modern textiles magazine, Nov. 1953, p.53. ⅛ col.

"This valuable reference work . . . defines the generally accepted terminology of the more widely used terms and materials of the chemical process industries . . . The up-to-date information found in this Dictionary is the outcome of intensive research and the result of extensive checking with industry, educational institutions, libraries, etc."

Oil, paint and drug reporter, Nov. 9, 1953, p.36. ⅛ col.

"An alphabetical compilation of names, trade names and scientific terms used by the paint industry in particular, and other chemical process industries related thereto. In general, it is a good and useful volume, and the definitions and descriptive material is of such nature that it goes beyond the usual limitations of a dictionary . . . Its definitions are concise, yet sufficiently descriptive to convey a real message about the material to those in the industry which would employ it. In this sense the volume is more of an encyclopedia than a dictionary."

Scientific monthly, Nov. 1953, p.273. ⅓ col.

"No work more misnamed has come to the Editor's desk in years. This is the fourth edition of what was previously called the *National Paint Dictionary,* certainly a far more appropriate title. No terms from the biological sciences are included . . . Its coverage of physical terms is sufficiently apparent from the absence of 'protron,' [sic] 'neutron,' and 'electron'; and its adequacy for general chemistry is revealed by the absence of 'valence' and by the definition of 'bond' as 'the attachment at an interface between an adhesive and an adherent, or as a verb, it means to attach materials together by adhesives. The term is frequently used in the Adhesives Industry.' Within the limits of the Paint Formulary, this is perhaps a useful reference work." *B. G.*

Stoughton, Bradley, and others.
Engineering metallurgy. Ed.4, revised. 479p. 1953. McGraw, New York, $7.50.

American machinist, Oct. 12, 1953, p.325. ⅓ col.

"Represents nearly 30 years of experience in meeting the market with a satisfactory, up-to-date text for both engineering students and industrial readers. Many new developments in metallurgy since the third edition are covered . . . Bibliographies have been greatly expanded to aid the reader in getting a well-rounded understanding of the present stage of engineering metallurgy."

Product engineering, Nov. 1953, p.294, 296. ⅖ col.

"An up-to-date study of metallurgy designed to be used by sophomore-junior engineering students, particularly those who do not plan to specialize in metallurgical engineering. Emphasis is on aspects of metallurgy necessary in the continuance of their course and what they must know in the early part of their career. Subject matter covered deals primarily with metal utilization rather than production . . . New developments in metallurgy since the third edition and especially since World War II have been added."

Swenson, George W., jr.
Principles of modern acoustics. 217p. 1953. Van Nostrand, New York, $4.

Journal of the Acoustical Society of America, Sept. 1953, p.1020. ½ col.

"A very creditable book which would be suitable for a two-hour course in Acoustics at the intermediate level. The treatment covers the usual subjects of oscillations, the vibrating

string, the vibrating membrane, acoustic waves, radiators, acoustic circuits, architectural acoustics, and speech and hearing . . . There are an adequate number of problems at the end of each chapter." *Floyd A. Firestone.*

Talbert, Thomas Jesse.

Growing fruit and vegetable crops. 350p. 1953. Lea, Philadelphia, $4.50.

Soil science, Nov. 1953, p.402. ⅓ p.

"The author . . . has spent a lifetime in the study of the plants mentioned, and his conclusions with respect to the several varieties and their requirements as to climate, soil, manures, fertilizers, seeding, spacing, cultivation, irrigation, harvesting, and storage merit consideration. The 25 chapters cover all the common tree, vine, and cane fruits, the root, salad, potato, tomato, and melon groups of crops, and a considerable variety of miscellaneous material . . . The illustrations are well chosen and add materially to the presentation . . . A very useful book to have close at hand for frequent reference."

Tullis, James L., ed.

Blood cells and plasma proteins; their state in nature. 436p. 1953. Academic Press, New York, $8.50.

Journal of chemical education, Nov. 1953, p.593. ⅞ col.

"This reviewer knows of no single volume to which one may turn for such a complete summary of present knowledge concerning the multitude of proteins of the plasma and in addition a detailed description of the properties of the formed elements of the blood: erythrocytes, leucocytes, and platelets." *F. A. Cajori.*

Journal of the American Chemical Society, Oct. 5, 1953, p.4883. ⅔ col.

"In seven sections, dealing with the following topics: the formed and fluid parts of human blood, blood coagulation, immunity, erythrocytes, leucocytes, plasma enzymes and lipoproteins. Most of these sections include contributions by several different authors. The most recent advances are stressed, and many of the topics have not been discussed elsewhere in summary form (at least outside the medical literature) . . . To those with a real interest in the special topics discussed this book will be very valuable. Its benefit to the general reader, however, is likely to be limited." *Charles Tanford.*

Journal of the American Medical Association, Aug. 1, 1953, p.1390. ⅓ col.

"The subjects are discussed by a number of authorities, and many charts, tables, and diagrams illuminate the text. The material . . . is highly important in view of the increasing use of various fractions of human blood in the practice of medicine . . . Part of the material is highly technical and is meaningful primarily to those who have a special interest in the chemical aspects of the subject. On the other hand, a large portion of the book is of general medical and biological scope and importance and is understandable without special knowledge of physical chemistry . . . Recommended to anyone interested in keeping abreast of modern developments in medicine and its allied fields."

Journal of the American Pharmaceutical Association, scientific edition, Oct. 1953, p.642. 1 col.

"No. 2 in a series of Memoirs of the University Laboratory of Physical Chemistry Related to Medicine and Public Health of Harvard University, Cambridge, Mass., and deals with the present status of knowledge concerning blood and its component parts . . . Based on seminars delivered at Harvard during February, March, and April of 1951 . . . Well documented throughout with references given at the end of each chapter. An author index and a subject index are provided . . . Printing and binding are of good quality."

Uren, Lester C.

Decimal system for classifying data pertaining to the petroleum industry. 94p. 1953. Univ. of California Press, Berkeley, Calif., $2.50.

Journal of petroleum technology, Oct. 1953, p.6. 8 l.

"A thorough, logical classification which is sufficiently extensive to provide a place for relatively specialized items. As in other decimal systems the large classes are general in scope with the additional digits providing the breakdown into the more specific subdivisions. A complete, alphabetical subject index to the classification is included, and the author gives brief instructions on its effective application to a collection or accumulation of material."

Journal of the Institute of Petroleum, Sept. 1953, p.481 A. ⅓ p.

"It is now 25 years since Professor Uren's system was first published by the National Petroleum Co. . . . The petroleum industry has expanded greatly, and technical developments have been wide. Therefore, the author of the classification has found it necessary to extend it to meet this expansion, an extension which can readily be made at any time without disrupting the existing notations. The Uren classification has the advantage that it is simple to operate and logical in its lay-out." *G. S.*

Van Heyningen, W. E. See **Fildes,** Paul, & **van Heyningen,** W. E., ed.

Wagner, Carl.

Thermodynamics of alloys; translated by S. Mellgren and J. H. Westbrook. 161p. 1952. Addison-Wesley Press, Cambridge, Mass., $6.50.

Transactions of the Faraday Society, Sept. 1953, p.1112. 1 p. including another review.

"An American translation, revision and enlargement of Wagner's article on *Thermodynamik metallischer Mehrstoffsysteme* in *Handbuch der Metallphysik* (ed. Masing, 1940), and the hybrid character of the new work is rather obvious. Retaining the *Handbuch* form, it provides a concentrated summary of the present state of knowledge in its field." *J. A. K.*

Watt, George, & **Morgan,** L. O.

Laboratory experiments in general chemistry and semi-micro qualitative analysis. 228p. 1953. McGraw, New York, $3.50.

Analytical chemistry, Oct. 1953, p.1573. ⅓ col.

"A modification of 'Laboratory Experiments in General Chemistry and Qualitative Analysis,' by Watt, in that Part Two provides for qualitative analysis on a semimicro scale. Divided into two parts, this manual is designed to ac-

company 'General Chemistry,' by Felsing and Watt, but is readily adaptable to use with other textbooks. Part One consists of 49 general experiments that place emphasis upon principles and upon the quantitative aspects of the subject . . . Part Two is concerned with semi-micro qualitative analysis."

Weibel, Adelé Coulin.

Two thousand years of textiles. 169p. 1952. Pantheon Bks., Inc., 33 Avenue of the Americas, New York, $20.

Textile research journal, Oct. 1953, p.761. ⅔ col.

"The first comprehensive work on textile art to be published in the English language, which presents a history of the development commencing with the fragments preserved in the Neolithic cave dwellings and bog burials. The major part is devoted to 256 plates, some in color, illustrating 331 fabrics, and including 95 pages of description of the fabrics, all arranged chronologically . . . The author is a specialist in all branches of textile art: woven fabrics, embroidery, lace, rugs, and tapestry. This knowledge is based on a sound training in the history of art."

Williams, Arthur O., jr.

Electronics; physical principles and application. 306p. 1953. Van Nostrand, New York, $4.50.

American journal of physics, Oct. 1953, p.580. 1¼ col.

"Professor Williams has related his electronics to contemporary physics in a very effective way. His book is almost a modern physics text, tied together by the ever recurring theme of how electronics contributes to progress in physics . . . Intended for a one-semester undergraduate course with a basic prerequisite of a year of general physics and a beginning acquaintance with calculus. Students with this limited a background will find it very difficult to master the material in the text. While all the necessary information is there, it is in a highly condensed state . . . There is no 'padding' in this book. It is all business from start to finish . . . A valuable contribution to the teaching of intermediate physics." *John N. Cooper.*

Review of scientific instruments, Oct. 1953, p.977. ⅞ col.

"This text has presumably been found quite satisfactory in its use at Brown University and should be satisfactory for comparable student use elsewhere. It does not appear to be particularly well adapted for engineering student use. It would be of little interest to readers wishing a detailed knowledge of electronics principle and practices." *Samuel Seely.*

Williams, T. I.

The chemical industry; past and present. 192p. 1953. Penguin, Middlesex, England, 2s. 6d.

Chemical age, Nov. 7, 1953, p.976. ⅝ col.

"Describes, almost without resource to technical terms . . . the complete history of the chemical industry in Britain, together with those foreign developments which were of particular importance to its growth. The treatment is not strictly chronological . . . Of a suitable length for a train journey, written in a scholarly but entertaining style, 'The Chemical Industry' may prove of value in the establishment and maintenance of better relations between the public and the manufacturers—and that is a matter of great importance." *B. I.*

India-rubber journal, Oct. 24, 1953, p.673. ½ col.

"Will give the layman a splendid insight into the vast ramifications of Britain's chemical industry and . . . will be read with interest by and prove informative to many others who already have an association of one kind or another with the industry. The author tells of the history, development and present-day organization of the industry, and in the sixteenth and last chapter, which is very short, discusses the future of the industry . . . It is to be hoped that this little book will be widely read by those who at present know very little about the vital part which the chemical industry plays in our every-day life."

Wolfe, T. K., & Kipps, M. S.

Production of field crops. Ed.4. 495p. 1953. McGraw, New York, $6.50.

Soil science, Oct. 1953, p.319. 10 l.

"Contains new chapters on the history of American agriculture and on grassland farming, and more space is given to the rice crop. The references, which are appended to each chapter, have been brought up to date, and are followed by 'topics for discussion.' The chapters on peanuts, cowpeas, sweet potatoes, cotton, sugar cane, and tobacco are especially well developed, by reason of the authors' familiarity with these important southern crops. The material is presented in a very attractive manner, with excellent illustrations . . . A highly important book in its field."

Woolley, Leonard.

Spadework in archaeology. 124p. 1953. Philosophical Library, New York, $4.75.

Scientific monthly, Oct. 1953, p.220. 1 col.

"In this brief and easily read book a man who can be called the greatest living archaeologist gives us the benefit of his wisdom, acquired in fifty years of digging . . . This is more than a manual of how to dig, to handle workmen, and to deal with government officials. It is more than a collection of amusing anecdotes. It is first hand history and not the usual product of compilers . . . Even in his most formal reports Sir Leonard's writing is never tedious. In *Spadework* it is delightful." *Carleton S. Coon.*

Wylie, C. R., jr.

Calculus. 565p. 1953. McGraw, New York, $6.

Scientific monthly, Nov. 1953, p.272. 1 col.

"Presupposes a course in analytic geometry, covers the conventional elementary material of differential and integral calculus, and closes with an introductory chapter on differential equations. Except for the first two chapters, the material is conventionally arranged; differentiation is studied extensively before any detailed material is presented on integration. There are numerous illustrative examples and exercises, many of which involve familiar applications . . . The principal advantage of this text seems to be a pervading concern with the student's difficulties. The first chapter may turn out to be a genuine pedagogical contribution, and there are many valuable details." *F. A. Ficken.*

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For "**Clark**, Claud L." (p.144) read **Clark**, Claude L.

For "**Hansel**, French K. Clinical allergy. 1005p. 1953. Mosby, St. Louis, $7.50." (p.88). Read **Hansel**, French K. Clinical allergy. 1005p. 1953. Mosby, St. Louis, $17.50.

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